

(4) signal distinguishing control instructions, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission, said information transmission comprising signals of said plurality of signal types;

detecting said signals in said information transmission;

passing at least some of said signals to said television monitor, said first processor, and said second processor; and

identifying a specific signal based on a signal distinguishing control instruction and causing one of said plurality of devices to receive said specific signal based on an output control instruction, thereby to cause said device to display, process, or respond to a signal of a specific type.

197. (New Claim) The method of claim 196, further comprising the steps of:

comparing said output control instructions to control function invoking information;

and

executing a plurality of prestored output control instructions.

198. (New Claim) The method of claim 197, wherein said output control instructions control a computer to output and cease outputting a receiver specific datum generated in accordance with at least one identified specific signal.

199. (New Claim) The method of claim 197, wherein said output control instructions control said receiver station to present, at said television monitor, a combined or sequential presentation of television programming and a receiver specific datum generated in accordance with at least one identified specific signal.

200. (New Claim) The method of claim 196, wherein said signal distinguishing control instructions enable said receiver station to process a digital television signal.

201. (New Claim) The method of claim 200, wherein said signal distinguishing control instructions enable said receiver station communicate one of analog video and analog audio to said television monitor.

202. (New Claim) The method of claim 196, wherein said receiver station receives part of a television program and identifies a plurality of specific signals, said method further comprising the steps of:

generating a balance of said television program in response to a first of said plurality of identified specific signals; and

synchronizing said received part of a television program and said generated balance of said television program based on a second of said plurality of identified specific signals.

203. (New Claim) The method of claim 196, further comprising the steps of: storing a signal distinguishing control instruction identifier in accordance with said specific signal; and

detecting a signal distinguishing control instruction of a new composition and/or length based on said stored signal distinguishing control instruction identifier.

204. (New Claim) A method of controlling the timing of data processing at a receiver station, said receiver station having a processor capable of processing data in response to one or more control signals, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission, said information transmission comprising embedded control signals, said control signals being of a plurality of signal types;

detecting said embedded control signals in said information transmission;  
identifying a specific type of control signal or a device to output and waiting for some period of time to receive a control signal of said specific type or from said device, thereby to process said specific control signal when received as being of a specific signal type.

205. (New Claim) The method of claim 204, wherein said control signal of said specific type is one of said embedded control signals and is received by a processor from a control signal detector that receives at least a portion of said information transmission, said method further comprising controlling said processor to wait for input from said control signal detector.

206. (New Claim) The method of claim 205, wherein said receiver station identifies a signal distinguishing control instruction and said step of controlling said processor to wait is based on said signal distinguishing control instruction.

207. (New Claim) The method of claim 206, wherein said signal distinguishing control instruction is one of said embedded control signals, said method further comprising the step of comparing said embedded control signals to a predetermined signal distinguishing control instruction identifier.

208. (New Claim) The method of claim 205, wherein said processor is capable of receiving subscriber input, said method further comprising the step of invoking or revoking broadcast or cablecast control of said processor.

209. (New Claim) The method of claim 205, further comprising the steps of:  
storing a signal distinguishing control instruction identifier in accordance with said control signal of said specific type; and

detecting a signal distinguishing control instruction of a new composition and/or length based on said stored signal distinguishing control instruction identifier.

210. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a processor capable of processing data in response to one or more types of control signals, comprising the steps of:

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- (1) receiving a broadcast or cablecast transmission to be transmitted;
  - (2) receiving a first signal distinguishing control instruction which at said at least one receiver station operates to enable said receiver station to process a control signal when received as being of a specific type;
  - (3) receiving a first control signal which operates at a transmitter station to communicate said first signal distinguishing control instruction to a transmitter; and
  - (4) transmitting said broadcast or cablecast transmission and said first signal distinguishing control instruction.

211. (New Claim) The method of claim 210, wherein said transmitter station generates a plurality of control signal types in response to said first control signal, said generated control signal types including processor interrupt signals and switch control signals.

212. (New Claim) The method of claim 211, wherein said transmitter station is an intermediate transmitter station and one or more of said broadcast or cablecast transmission and said first signal distinguishing control instruction is received from a remote origination station.

213. (New Claim) The method of claim 211, wherein said first control signal is one of (1) a generation schedule and (2) an instruct signal which operates at said receiver station to generate one of said signal types at a specific time.

214. (New Claim) The method of claim 210, wherein said broadcast or cablecast transmission includes part of a television program, said receiver station generates a balance of said television program, and said receiver station synchronizes the delivery at an output device of said part of a television program and said balance of said television program based on said first signal distinguishing control instruction, said method further comprising the step of transmitting said part of said television program to said receiver station.

215. (New Claim) The method of claim 214, wherein said receiver station includes a memory operatively connected to said output device, said method further comprising the step of transmitting a second signal distinguishing control instruction to serve as a basis for controlling said receiver station to clear said memory.

216. (New Claim) The method of claim 210, wherein said transmitter station transmits said first signal distinguishing control instruction in the code portion of one of (1) a television signal and (2) a multichannel signal containing said digital television or digital video signal, said method further comprising the step of transmitting at least some of a second control signal which operates at said receiver station to control a receiver to receive some other portion one of a television signal and a multichannel signal.

217. (New Claim) The method of claim 216, wherein said first control signal causes said transmitter station to expand or contract said code portion.

218. (New Claim) The method of claim 210, wherein said first signal distinguishing control instruction enables said receiver station to perform the steps of:

- (1) selecting at least some of a first message stream;
- (2) generating receiver specific message information;
- (3) organizing said selected some of said first message stream and said receiver specific message information in a sequence, said selected some of said first message stream

and said receiver specific message information in said sequence comprising a second message stream; and

(4) transmitting said second message stream, said method further comprising the step of transmitting said at least some of said first message stream to said receiver station.

219. (New Claim) The method of claim 218, wherein said receiver specific message information includes one or more of receiver specific cadence information, receiver specific processor code, receiver specific video for output, and a receiver specific video output command.

220. (New Claim) The method of claim 218, wherein said receiver station transmits said second message stream to one of (1) an intermediate transmitter station, (2) an ultimate receiver station, (3) a data collection station, (4) a data aggregation station, (5) a data distribution station, (6) a television or video signal origination station, and (7) a master communications network control station and said second message stream causes said one station to select specific ones of a plurality of processors and generate a plurality of signal types.

221. (New Claim) The method of claim 210, wherein said first signal distinguishing control instruction enables said receiver station to process respond to at least some of a message stream, said method further comprising the steps of:

generating said at least some of a message stream; and

transmitting said at least some of a message stream.

222. (New Claim) The method of claim 210, wherein said receiver station detects a second signal distinguishing control instruction of a new composition and/or length, said method further comprising the step of:

transmitting a control signal which operates at said receiver station to store a signal distinguishing control instruction standard identifier.

223. (New Claim) The method of claim 210, wherein said receiver station detects a second signal distinguishing control instruction of a new composition and/or length, said method further comprising the step of:

transmitting a control signal which operates at said receiver station to store a signal distinguishing control instruction standard identifier.

224. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a processor capable of processing data in response to one or more types of control signals, comprising the steps of:

(1) receiving, at a transmitter station, a broadcast or cablecast transmission to be transmitted and delivering said broadcast or cablecast transmission to a transmitter;

(2) receiving and storing a first signal distinguishing control instruction which at said at least one receiver station operates to enable said receiver station to process a first control signal as being of a specific signal type; and

(3) causing said first signal distinguishing control instruction to be communicated to the transmitter at a specific time, thereby to transmit said broadcast or cablecast transmission and said first signal distinguishing control instruction.

225. (New Claim) The method of claim 224, wherein said broadcast or cablecast transmission includes said first control signal and said transmitter station transmits said first signal distinguishing control instruction in response to a second control signal, said method further comprising the steps of:

inputting one of said broadcast or cablecast transmission and said first signal distinguishing control instruction to a control signal detector; and

detecting said second control signal at said transmitter station before said specific time.

226. (New Claim) The method of claim 225, wherein said receiver station assembles processor instructions based on information contained in said first control signal, said method further comprising the step of transmitting higher language code in said first control signal.

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227. (New Claim) The method of claim 226, wherein said broadcast or cablecast transmission contains a first video image, and said processor instructions operate (1) to generate a second video image by processing subscriber input and (2) to output, at a video monitor, a combined or sequential presentation of said first video image and said second video image.

228. (New Claim) The method of claim 224, wherein said receiver station receives said first control signal in a message stream and said first signal distinguishing control instruction operates at said receiver station to perform one of (1) receiving a specific portion of a television or video signal, (2) receiving a specific portion of a multichannel signal containing a television or video signal, (3) discarding some of said message stream while waiting to receive a control signal which synchronizes said station in processing and responding to message information contained in a television or video signal, said method further comprising the step of transmitting said television or video signal.

229. (New Claim) The method of claim 224, wherein said first signal distinguishing control instruction operates to synchronize said receiver station in processing and responding to message information contained in said broadcast or cablecast transmission, said method further comprising the step of embedding at least some of said message information in said broadcast or cablecast transmission.



230. (New Claim) The method of claim 229, wherein said first signal distinguishing control instruction comprises an end of file signal or operates at said receiver station to communicate a processor interrupt.

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231. (New Claim) The method of claim 229, wherein said message information comprises an analysis instruction, said method further comprising the steps of:  
composing a message stream containing an instruction which operates at said receiver station to identify signal composition or structure; and  
transmitting said message stream.

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232. (New Claim) The method of claim 224, wherein said first signal distinguishing control instruction comprises a header, said method further comprising the step of transmitting a second signal distinguishing control instruction which operates at said receiver station to identify the beginning or end of said first control signal.

233. (New Claim) The method of claim 232, wherein said second signal distinguishing control instruction is a length token.

234. (New Claim) The method of claim 232, wherein said second signal distinguishing control instruction identifies the beginning or end of a software or data file.

235. (New Claim) The method of claim 232, further comprising the step of transmitting a third signal distinguishing control instruction which operates to identify a data format of said first control signal.

236. (New Claim) The method of claim 224, wherein said transmitter station stores said broadcast or cablecast transmission for a period of time before delivering said broadcast or cablecast transmission to said transmitter, said method further comprising the steps of:

inputting said broadcast or cablecast transmission to a control signal detector; and  
detecting the presence of a storage or output control signal at said transmitter  
station.

237. (New Claim) The method of claim 224, wherein a controller controls at  
least one of (1) a switch and (2) a signal generator to communicate said first signal  
distinguishing control instruction and said broadcast or cablecast transmission from different  
sources to said transmitter, said method further comprising the steps of:

inputting said broadcast or cablecast transmission to a control signal detector; and  
detecting the presence of a second control signal which operates at said transmitter  
station to control said at least one of (1) a switch and (2) a signal generator.

238. (New Claim) The method of claim 237, wherein said at least one of a  
switch and a signal generator is a signal generator and said second control signal controls  
said signal generator to embed said first signal distinguishing control instruction in said  
broadcast or cablecast transmission.

239. (New Claim) The method of claim 224, wherein said receiver station  
includes a plurality of processors, said method further comprising the steps of:  
receiving at a signal generator an information transmission containing at least a first  
message to be processed at said receiver station;  
generating a second message containing multiple elements of at least fixed length,  
said second message including (1) cadence information which is effective at said receiver  
station to execute a predetermined instruction and (2) at least one element containing one or  
more instructions to be directed to a specific one of said plurality of processors;  
embedding said second message into said information transmission in sequence with  
said first message; and  
transmitting said information transmission to said receiver station.

240. (New Claim) The method of claim 224, wherein said receiver station includes a plurality of processors, said method further comprising the steps of:

generating a plurality of variable length message elements, each variable length element containing at least one instruction and having one of (1) an internal length token, and (2) an associated signal designating a file, said plurality of variable length message elements containing instructions directed to different ones of said plurality of processors; and

transmitting said first signal distinguishing control instruction and said generated plurality of variable length message elements in a sequence.

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241. (New Claim) The method of claim 224, further comprising the steps of:  
generating a first message containing first cadence information, an execution segment, and an information segment, said information segment containing a first part of a program;

generating one or more second messages, each of said second messages containing second cadence information and some other part of said program;

embedding said first message into one or more information transmissions;

subsequently embedding said one or more second messages into said one or more information transmissions to thereby compose a message stream; and

transmitting said message stream.

242. (New Claim) The method of claim 241, wherein said program is a television program.

243. (New Claim) The method of claim 241, wherein said program is a computer program.

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244. (New Claim) The method of claim 224, wherein said receiver station has a memory operatively connected to said processor, said method further comprising the steps of:

generating a first message containing multiple elements of at least fixed length, said first message including an information segment containing at least some of a program and a execution instruction with operates at said receiver station to store said at least some of a program;

generating a second message containing multiple elements of at least fixed length, said multiple elements comprising an execution instruction which operates at said receiver station to output said memory;

firstly embedding said first message into an information transmission;

subsequently embedding said second message into said information transmission;

and

transmitting said information transmission.

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245. (New Claim) The method of claim 244, wherein said first control signal operates at said receiver station to clear said memory.

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225. (New Claim) The method of claim 224, wherein said plurality of receiver stations include a plurality of processors and said first signal distinguishing control instruction designates one of a digital signal and an analog signal, said method comprising the steps of:

selecting code to be directed to said plurality of processors;

generating one or more first elements or fields to identify the structure of a message;

generating one or more second elements or fields to identify one or more processor instructions or data formats in said message;

organizing said selected code in a sequence with a plurality of message components, said sequence including said generated first and second elements or fields, said selected code organized in said sequence with said plurality of message components and said generated first and second elements or fields comprising said message; and

embedding said organized sequence into an information transmission, said information transmission containing one or more of (1) a message stream, (2) video, and (3) audio; and

transmitting said information transmission.

247. (New Claim) The method of claim 246, further comprising the steps of:  
transmitting an analog television signal; and  
transmitting a digital television signal.

248. (New Claim) The method of claim 224, wherein said first signal distinguishing control instruction designates a command, said method further comprising the steps of:

generating an execution instruction specifying a control function to be executed;  
organizing said first signal distinguishing control instruction and said execution instruction in a sequence; and  
transmitting said first signal distinguishing control instruction and execution instruction in said sequence.

249. (New Claim) The method of claim 248, further comprising the steps of:  
generating a third instruction specifying a data structure, length, or format; and  
transmitting data in said command.

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250. (New Claim) The method of claim 248, wherein said command is a specified condition command, said method further comprising the step of generating data specifying a condition.

251. (New Claim) The method of claim 224, wherein said processor at said receiver station is capable of receiving a control signal from a plurality of inputs, said plurality of inputs including a control signal detector operatively connected to a broadcast or cablecast signal receiver, said method further comprising the step of transmitting a second control signal which operates at said receiver station to cause said processor to wait to receive said first control signal from said control signal detector.

252. (New Claim) The method of claim 224, further comprising the steps of: receiving, at said transmitter station, a second control signal which operates at said receiver station to retransmit one or more of (1) said signal distinguishing control instruction, and (2) said first control signal; and transmitting said second control signal to said receiver station.

253. (New Claim) The method of claim 224, wherein said transmitter station is an origination station, said method further comprising the step of transmitting one of (1) a generation schedule and (2) an instruct signal which operates at said receiver station to generate one of said signal types at a specific time.

254. (New Claim) The method of claim 253, wherein said receiver station is an intermediate transmitter station and said first control signal is effective to generate one of (1) video, (2) higher language code, and (3) machine executable code according to said one of a generation schedule and an instruct signal.

255. (New Claim) A method of processing information at a receiver station, said receiver station having a plurality of devices capable of receiving a plurality of signal types,

said plurality of devices comprising a television monitor capable of receiving and displaying television programming, a first processor capable of receiving and processing code, and a second processor capable of receiving and responding to control information, and with said plurality of signal types including:

- (1) television programming,
- (2) processor code,
- (3) execution instructions, and
- (4) cadence information, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission, said information transmission comprising signals of said plurality of signal types;

detecting said signals in said information transmission;

passing at least some of said signals to said television monitor, said first processor, and said second processor;

causing a specific one of said plurality of devices to receive a specific one of said plurality of signal types; and

communicating a television signal to said television monitor in accordance with a signal of said specific type.

256. (New Claim) The method of claim 255, wherein said plurality of devices includes a signal processor and said signal of said specific type is a digital television signal.

257. (New Claim) The method of claim 255, wherein said plurality of devices includes a signal processor and said signal of said specific type is an analog television signal.

258. (New Claim) The method of claim 255, wherein said specific one of said plurality of devices is capable of processing a signal distinguishing control instruction, said method further comprising the steps of:

storing a signal distinguishing control instruction identifier at said specific one of said plurality of devices in accordance with said specific one of said plurality of signal types; and

processing a signal distinguishing control instruction of a new composition and/or length based on said stored signal distinguishing control instruction identifier.

259. (New Claim) A processor apparatus for processing a plurality of programming at a receiver station, said apparatus comprising:

means for receiving a broadcast or cablecast transmission;

means for demodulating said broadcast or cablecast transmission to detect an information transmission, said information transmission comprising signals of a plurality of signal types;

means for detecting said signals in said information transmission;

means for passing at least some of said signals to a television monitor, a first processor, and a second processor, said first processor capable of receiving and processing computer programming, and said second processor capable of receiving and responding to control signals; and

means for identifying a specific signal based on a signal distinguishing control instruction and causing one of a plurality of devices to receive said specific signal based on an output control instruction, thereby to cause said device to display, process, or respond to a signal of a specific type.

260. (New Claim) A controller apparatus for controlling the timing of data processing at a receiver station, said apparatus comprising:

a receiver means for receiving a broadcast or cablecast transmission;



demodulating means operably connected to said receiver means, said demodulating means for demodulating said broadcast or cablecast transmission;

first detection means operably connected to said demodulator means, said first detection means for detecting an information transmission, said information transmission comprising embedded control signals, said control signals being of a plurality of signal types;

second detection means operably connected to said demodulator means, said second detection means for detecting said embedded control signals;

identifying means operably connected to said second detection means, said identifying means identifying a specific type of control signal or a device to output;

first processor means capable of processing data in response to one or more said control signals; and

second processor means operably connected to said identifying means, said second processor means for processing a specific control signal after waiting for some period of time to receive said specific type control signal or a signal from said device, said processing based on said specific control signal being of a specific signal type.

261. (New Claim) A method of processing signals in a television receiver, said television receiver having a plurality of processors on a single microchip, said method comprising the steps of:

receiving a television signal;

detecting digital data on said television signal;

passing at least a portion of said digital data to each of said plurality of processors;

passing a control portion of said digital data to a control processor;

processing said passed at least a portion of said digital data and outputting processed information at each of said plurality of processors; and

controlling the passing of said processed information from said microchip in response to said passed control portion.

262. (New Claim) A method of processing signals in a television receiver, said television receiver having a plurality of processors on a single microchip, said method comprising the steps of:

- receiving a television signal;
- detecting digital data on said television signal;
- passing at least a portion of said digital data to each of said plurality of processors;
- passing a control portion of said digital data to a control processor;
- processing said passed at least a portion of said digital data and outputting processed information at each of said plurality of processors; and
- controlling the passing of said processed information from one of said plurality of processors in response to said passed control portion.

263. (New Claim) A method of processing signals in a television receiver, said television receiver having a plurality of processors on a single microchip, said method comprising the steps of:

- receiving a television signal;
- detecting digital data on said television signal;
- passing at least a portion of said digital data to each of said plurality of processors;
- passing a control portion of said digital data to a control processor;
- controlling the passing of digital data to one of said plurality of processors in response to said passed control portion; and
- processing said passed at least a portion of said digital data and outputting processed information at each of said plurality of processors.

264. (New Claim) A method of processing signals in a receiver of a broadcast or cablecast transmission, said receiver including a video receiver and having a plurality of processors on a single microchip, said method comprising the steps of:

receiving a broadcast or cablecast signal;  
detecting digital data on said received signal;  
passing at least a portion of said digital data to each of said plurality of processors;  
passing a control portion of said digital data to a control processor;  
controlling the passing of said digital data to one of said plurality of processors in  
response to said passed control portion; and  
processing said passed at least a portion of said digital data and outputting processed  
information at each of said plurality of processors.

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265. (New Claim) A method of processing signals at a receiver station, said  
receiver station having a plurality of processors for processing a data message and a plurality  
of buffers with each of said plurality of buffers capable of passing data of said message to at  
least one of said plurality of processors, said method comprising the steps of:

receiving a broadcast or cablecast transmission;  
demodulating said broadcast or cablecast transmission to detect an information  
transmission thereon, said information transmission including at least said data message;  
detecting said data message on said information transmission;  
passing at least a portion of said data message to each of said plurality of buffers; and  
causing at least one of said plurality of buffers to receive only some of said data  
message, thereby to cause said plurality of processors to process said data message  
selectively.

266. (New Claim) A method of processing signals at a receiver station, said  
receiver station having a plurality of processors for processing a data message, said method  
comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including at least said data message;  
detecting said data message on said information transmission;  
passing at least a portion of said data message to each of said plurality of processors;  
and  
causing at least one of said plurality of processors to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively.

267. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:  
receiving a television signal to be transmitted;  
receiving said digital data which at the television receiver operates to control a passing of processed information from said microchip in response to a control portion of said digital data passed to a control processor;  
receiving a control signal which operates at a transmitter station to communicate said digital data to a transmitter; and  
transmitting said television signal including said digital data to control said passing of said processed information from said microchip in response to said control portion of said digital data passed to said control processor.

268. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:  
receiving a television signal to be transmitted;

receiving said digital data which at the television receiver operates to control a passing of processed information from one of said plurality of processors in response to a control portion of said digital data passed to a control processor;

receiving a control signal which operates at a transmitter station to communicate said digital data to a transmitter; and

transmitting said television signal including said digital data to control said passing of said processed information from one of said plurality of processors in response to said control portion of said digital data passed to said control processor.

269. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:

receiving a television signal to be transmitted;

receiving said digital data which at the television receiver operates to control a passing of said digital data to one of said plurality of processors in response to a control portion of said digital data passed to a control processor;

receiving a control signal which operates at a transmitter station to communicate said digital data to a transmitter; and

transmitting said television signal including said digital data to control said passing of said digital data to one of said plurality of processors in response to said control portion of said digital data passed to said control processor.

270. (New Claim) A method of communicating digital data to a receiver, said receiver having a video receiver and a plurality of processors on a single microchip, comprising the steps of:

receiving a broadcast or cablecast signal to be transmitted;

receiving said digital data which at the television receiver operates to control a passing of said digital data to one of said plurality of processors in response to a control portion of said digital data passed to a control processor;

receiving a control signal which operates at a transmitter station to communicate said digital data to a transmitter; and

transmitting said broadcast or cablecast signal including said digital data to control said passing of said digital data to one of said plurality of processors in response to said control portion of said digital data passed to said control processor.

271. (New Claim) A method of communicating a data message to a plurality of receiver stations, each of said plurality of receiver stations having a plurality of processors for processing a data message and a plurality of buffers with each of said plurality of buffers capable of passing data of said data message to at least one of said plurality of processors, comprising the steps of:

receiving a broadcast or cablecast signal to be transmitted;

receiving said data message which at one of said plurality of receiver stations operates to cause at least one of said plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively;

receiving a control signal which operates at a transmitter station to communicate said data message to a transmitter; and

transmitting said broadcast or cablecast signal including said data message to pass at least a portion of said data message to each of said plurality of buffers and cause at least one of said plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively.

272. (New Claim) A method of communicating a data message to a plurality of receiver stations, each of said plurality of receiver stations having a plurality of processors for processing a data message, comprising the steps of:

- receiving a broadcast or cablecast signal to be transmitted;
- receiving said data message which at one of said plurality of receiver stations operates to cause at least one of said plurality of processors to receive only a portion of said data message, thereby to cause said plurality of processors to process said data message selectively;
- receiving a control signal which operates at a transmitter station to communicate said data message to a transmitter; and
- transmitting said broadcast or cablecast signal including said data message to pass at least a portion of said data message to each of said plurality of processors and cause at least one of a plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively.

273. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:

- receiving a television signal to be transmitted and delivering said television signal to a transmitter;
- receiving and storing said digital data which at the television receiver operates to control a passing of processed information from said microchip in response to a control portion of said digital data passed to a control processor; and
- causing said digital data to be communicated to the transmitter at a specific time, thereby to transmit said television signal including said digital data to control said passing of said processed information from said microchip in response to said control portion of said digital data passed to said control processor.

274. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:

receiving a television signal to be transmitted and delivering said television signal to a transmitter;

receiving and storing said digital data which at the television receiver operates to control a passing of processed information from one of said plurality of processors in response to a control portion of said digital data passed to a control processor; and

causing said digital data to be communicated to the transmitter at a specific time, thereby to transmit said television signal including said digital data to control said passing of said processed information from one of said plurality of processors in response to said control portion of said digital data passed to said control processor.

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275. (New Claim) A method of communicating digital data to a television receiver, said television receiver having a plurality of processors on a single microchip, comprising the steps of:

receiving a television signal to be transmitted and delivering said television signal to a transmitter;

receiving and storing said digital data which at the television receiver operates to control a passing of processed information to one of said plurality of processors in response to a control portion of said digital data passed to a control processor; and

causing said digital data to be communicated to the transmitter at a specific time, thereby to transmit said television signal including said digital data to control said passing of said processed information to one of said plurality of processors in response to said control portion of said digital data passed to said control processor.



276. (New Claim) A method of communicating digital data to a receiver, said receiver having a video receiver and a plurality of processors on a single microchip, comprising the steps of:

receiving a broadcast or cablecast signal to be transmitted and delivering said broadcast or cablecast signal to a transmitter;

receiving and storing said digital data which at the television receiver operates to control a passing of said digital data to one of said plurality of processors in response to a control portion of said digital data passed to a control processor; and

causing said digital data to be communicated to the transmitter at a specific time, thereby to transmit said broadcast or cablecast signal including said digital data to control said passing of said digital data to one of said plurality of processors in response to said control portion of said digital data passed to said control processor.

277. (New Claim) A method of communicating a data message to a plurality of receiver stations, each of said plurality of receiver stations having a plurality of processors for processing a data message and a plurality of buffers with each of said plurality of buffers capable of passing data of said message to at least one of said plurality of processors, comprising the steps of:

receiving a broadcast or cablecast signal to be transmitted and delivering said broadcast or cablecast signal to a transmitter;

receiving and storing said data message which at one of said plurality of receiver stations operates to cause at least one of said plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively; and

causing said data message to be communicated to the transmitter at a specific time, thereby to transmit said broadcast or cablecast signal including said data message to pass at least a portion of said data message to each of said plurality of buffers and cause at least one

of said plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively.

278. (New Claim) A method of communicating a data message to a plurality of receiver stations, each of said plurality of receiver stations having a plurality of processors for processing a data message, comprising the steps of:

receiving a broadcast or cablecast signal to be transmitted and delivering said broadcast or cablecast signal to a transmitter;

receiving and storing said data message which at one of said plurality of receiver stations operates to cause at least one of said plurality of processors to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively; and

causing said data message to be communicated to the transmitter at a specific time, thereby to transmit said broadcast or cablecast signal including said data message to pass at least a portion of said data message to each of said plurality of processors and cause at least one of a plurality of buffers to receive only some of said data message, thereby to cause said plurality of processors to process said data message selectively.

279. A method of controlling a receiver station, said receiver station having a first processor executing processor instructions and being capable of generating or communicating signals on the basis of instructions detected in a broadcast or cablecast transmission, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission thereon, said information transmission comprising a first embedded control signal;

storing at a first memory, under control of said processor instructions, data  
designating a first portion of said processor instructions at which to resume processing;  
detecting said embedded first control signal on said information transmission;  
passing said detected first control signal to said first processor;  
resuming processing at said first portion of said processor instructions based on said  
detected first control signal and said stored data; and  
generating or communicating a signal under control of said processor instructions at  
a specific time.

280. (New Claim) The method of claim 279, wherein an interrupt signal is  
communicated to said first processor, said method further comprising the step of:

programming said processor to store data at or select said data from said first  
memory in response to said interrupt signal.

281. (New Claim) The method of claim 280, wherein said first processor is  
controlled by a controller, said method further comprising the step of passing at least some  
of said first control signal to said controller.

282. (New Claim) The method of claim 281, further comprising the steps of:  
executing a controlled function based on said first control signal; and  
controlling said first processor in accordance with said at least some of said first  
control signal.

283. (New Claim) The method of claim 281, further comprising the step of  
storing information at one of said first processor and said controller that evidences a passing  
of information in consequence of said first control signal.

284. (New Claim) The method of claim 283, wherein said stored evidence information designates one of (1) a mass medium program, (2) a second portion of said processor instructions, and (3) a complete output to be delivered to an output device.

285. (New Claim) The method of claim 283, wherein said stored evidence information designates an owner or supplier of information contained in said broadcast or cablecast transmission, said method further comprising the steps of:

detecting said processor instructions on said information transmission; and  
passing said processor instructions to said first processor.

286. (New Claim) The method of claim 280, wherein a second processor generates or communicates information for output in accordance with a computer program, said method further comprising the step of communicating said interrupt signal to said second processor to cause said second processor to communicate said generated information for output to an output device.

287. (New Claim) The method of claim 286, wherein said first processor is a control processor, said method further comprising the steps of:

executing a controlled function in response to a second control signal; and  
controlling a switch to communicate said computer program to said first processor.

288. (New Claim) The method of claim 286, wherein said computer program is one of an intermediate generation set and a program instruction set, said method further comprising the step of controlling a switch to communicate said one of an intermediate generation set and a program instruction set from a detector to said second processor.

289. (New Claim) The method of claim 286, wherein said first processor is capable of controlling a matrix switch to communicate information from a plurality of input sources to a plurality of devices, said method further comprising the steps of:

storing at a second memory data designating a second portion of processor instructions at which to resume processing; and  
responding to a second interrupt signal.

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290. (New Claim) The method of claim 289, wherein said matrix switch is a digital switch and said plurality of devices include a decryptor, said method further comprising the steps of:

controlling said digital switch to communicate at least some of said first control signal to said decryptor;

controlling said decryptor to decrypt said at least some of said first control signal; and

processing one of (i) an unencrypted portion of said first control signal and (ii) a decrypted portion of said first control signal.

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291. (New Claim) The method of claim 279; further comprising the step of selecting said data from said first memory in response to said first control signal.

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292. (New Claim) The method of claim 279, wherein a second portion of said processor instructions cause a digital switch to communicate a signal containing a computer program to a second processor, said method further comprising the steps of:

controlling said digital switch to communicate at least some of said information transmission to said decryptor;

controlling said decryptor to decrypt said at least some of said information transmission; and

responding to first interrupt signal communicated from said second processor in accordance with said computer program.

293. (New Claim) The method of claim 292, further comprising the steps of:

communicating said first control signal to said second processor in consequence of said first interrupt signal.

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294. (New Claim) The method of claim 279, wherein one of an intermediate generation set and a program instruction set is detected in said information transmission and said first processor controls a second processor to output from a second memory a signal containing one or more receiver specific data generated under control of said one of an intermediate generation set and a program instruction set, said method further comprising the steps of:

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determining that said second processor has failed to complete storing data at said second memory based on information stored at said first memory; and

clearing said second memory in consequence of said step of determining that said processor has failed to complete storing data at said second memory.

295. (New Claim) The method of claim 294, further comprising the step of causing said second processor to jump to one or more instructions in said one of an intermediate generation set and a program instruction set based on said step of determining.

296. (New Claim) The method of claim 295, further comprising the step of computing target data to designating said one or more instructions.

297. (New Claim) The method of claim 296, wherein said computers said target data by processing one or more of (1) a label, (2) a history of efficiency, and (3) an offset address, said method further comprising the step of storing said one or more of (1) a label, (2) a history of efficiency, and (3) an offset address.

298. (New Claim) The method of claim 279, wherein said receiver station is programmed to store information at said first memory information which signifies the completion of an event, said method further comprising the steps of:

detecting a second control signal in said information transmission; and  
loading said processor instructions at a second memory operatively connected to said first processor in response to said second control signal.

299. (New Claim) The method of claim 298, wherein said processor instructions are detected in said information transmission, said method further comprising the steps of:

determining a failure to complete an event based on information stored at said first memory; and

computing target data designating a second portion of said processor instructions based on said step of determining a failure.

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300. (New Claim) A method of controlling a receiver station, said receiver station having a processor capable of executing one or more processing instructions in response to a control signal, said method comprising the steps of:

storing information that designates a specific instruction or series of instructions;  
receiving a broadcast or cablecast transmission;  
demodulating said broadcast or cablecast transmission to detect an information transmission thereon, said information transmission comprising one or more embedded control signals;

detecting said one or more embedded control signals on said information transmission;

passing said detected one or more control signals to said processor;  
locating a specific instruction or series of instructions on the basis of said stored information, with said step of locating occurring in response to said detected one or more control signals, thereby to enable said station to execute said specific instruction or series of instructions in response to said one or more control signals.

301. (New Claim) The method of claim 300, further comprising the step of storing said information that designates a specific instruction or series of instructions at a memory in response to a first of said one or more embedded control signals and selecting said information that designates a specific instruction or series of instructions from said memory in response to a second of said one or more control signals.

302. (New Claim) The method of claim 301, wherein said information that designates a specific instruction or series of instructions comprises one of a label and an offset address, said method further comprising the steps of:

jumping to said specific instruction or series of instructions.

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303. (New Claim) The method of claim 302, further comprising the steps of: determining a failure to complete an event based on stored information; and computing target data designating a portion of said one or more processing instructions based on said step of determining.

304. (New Claim) A method for one or more transmitter stations to control at least one of a plurality of receiver stations each having a processor capable of generating signals on the basis of instructions detected in a broadcast or cablecast transmission, comprising the steps of:

- (1) receiving processor code to be transmitted;
- (2) receiving a first control signal which at one of said plurality of receiver stations operates to cause said processor of said at least one of a plurality of receiver stations to generate a signal under control of a designated portion of said processor code at a specific time;
- (3) receiving a second control signal which operates at a transmitter station to communicate one of said processor code and said first control signal to a transmitter; and



(4) transmitting said broadcast or cablecast transmission comprising one of said processor code and said first control signal to cause said processor of said at least one of a plurality of receiver stations to generate a signal under control of a designated portion of said processor code at a specific time.

305. (New Claim) The method of claim 304, further comprising the steps of:  
transmitting one of a label and an offset address to serve as a basis for selecting said designated portion of said processor code; and  
incorporating data into said first control signal to serve as a basis for determining whether an event has been completed.

306. (New Claim) The method of claim 305, wherein said first control signal operates at one of an intermediate transmitter station and an ultimate receiver station, said method further comprising the step of:  
embedding said processor code and said first control signal in a code portion of said broadcast or cablecast transmission; and  
transmitting mass medium programming in said broadcast or cablecast transmission.

307. (New Claim) A method for one or more transmitter stations to control at least one of a plurality of receiver stations each having a processor each capable of executing one or more processing instructions in response to a first control signal, comprising the steps of:

- (1) receiving a broadcast or cablecast transmission to be transmitted;
- (2) receiving said first control signal which at one of said plurality of receiver stations operates to cause one or more instructions to be located on the basis of stored information that identifies said one or more instructions;
- (3) receiving a second control signal which operates at a transmitter station to communicate said first control signal to a transmitter; and

(4) transmitting said broadcast or cablecast transmission comprising said first control signal.

308. (New Claim) The method of claim 307, further comprising the steps of:  
transmitting one of a label and an offset address to serve as a basis for selecting said designated portion of said processor code; and  
incorporating data into said first control signal to serve as a basis for determining whether an event has been completed.

309. (New Claim) The method of claim 308, wherein said first control signal operates at one of an intermediate transmitter station and an ultimate receiver station, said method further comprising the step of:  
embedding said processor code and said first control signal in a code portion of said broadcast or cablecast transmission; and  
expanding and contracting said code portion.

310. (New Claim) A method for one or more transmitter stations to control at least one of a plurality of receiver stations each having a processor capable of generating signals on the basis of processor instructions detected in a broadcast or cablecast transmission, comprising the steps of:

- (1) receiving a broadcast or cablecast transmission to be transmitted and delivering said broadcast or cablecast transmission to a transmitter;
- (2) receiving and storing one or more of processor instructions and a first control signal which at said at least one of a plurality of receiver stations operates to cause said processor of said at least one of a plurality of receiver stations to generate a signal under control of a designated portion of said processor instructions at a specific time; and
- (3) causing said one or more of said processor instructions and said first control signal to be communicated to the transmitter at a specific time, thereby to transmit said

broadcast or cablecast transmission comprising said one or more of said processor instructions and said first control signal.

311. (New Claim) The method of claim 310, further comprising the steps of:  
transmitting one of a label and an offset address to serve as a basis for selecting said designated portion of said processor instructions; and  
incorporating data into said first control signal to serve as a basis for determining whether an event has occurred before said specific time.

312. (New Claim) The method of claim 311, wherein said processor instructions synchronize delivery of television programming at said at least one receiver station, said method further comprising the steps of:  
transmitting at least some of said television programming; and  
transmitting said one or more processor instructions.

313. (New Claim) A method for one or more transmitter stations to control at least one of a plurality of receiver stations each having a processor each capable of executing one or more processor instructions in response to a first control signal, comprising the steps of:

- (1) receiving a broadcast or cablecast transmission to be transmitted and delivering said broadcast or cablecast transmission to a transmitter;
- (2) receiving and storing said first control signal which at one of said plurality of receiver stations operates to cause one or more processor instructions to be located on the basis of stored information that identifies said one or more processor instructions; and
- (3) causing said first control signal to be communicated to the transmitter at a specific time, thereby to transmit a broadcast or cablecast transmission comprising said first control signal.

314. (New Claim) The method of claim 10, further comprising the steps of:  
transmitting one of a label and an offset address to serve as a basis for selecting said designated portion of said processor instructions; and  
incorporating data into said first control signal to serve as a basis for determining whether an event has occurred before said specific time.

315. (New Claim) The method of claim 314, wherein said one or more processor instructions synchronize delivery of television programming at said at least one receiver station, said method further comprising the steps of:

transmitting some of said television programming; and  
transmitting said one or more processor instructions.

316. (New Claim) A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission, said method comprising the steps of:

receiving a first broadcast or cablecast transmission;  
demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data;  
detecting said digital data in said information transmission and passing said detected digital data to said processor;  
storing at least some of said detected digital data at said receiver station;  
inputting a control signal designating a second broadcast or cablecast transmission;  
and  
correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data with said step of inputting.

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317. (New Claim) The method of claim 316, wherein at least some of said detected digital data is stored at a processor interrupt signal detector, said method further comprising the step of causing said processor interrupt signal detector to delete or discard said at least some of said detected digital data stored at said processor interrupt signal detector.

318. (New Claim) The method of claim 316, wherein said step of inputting a control signal designating a second received broadcast or cablecast transmission comprises tuning a first receiver to receive said second broadcast or cablecast transmission in response to said control signal.

319. (New Claim) The method of claim 318, wherein said control signal is embedded in said second received broadcast or cablecast transmission, said method further comprising the step of receiving at least some of said second broadcast or cablecast transmission at a second receiver.

320. (New Claim) The method of claim 316, further comprising the step of programming said receiver station to interrupt said processor whenever a tuner is tuned or a receiver is actuated.

321. (New Claim) The method of claim 316, further comprising the step of controlling a selective communications device to communicate said first broadcast or cablecast transmission to a receiver.

322. (New Claim) The method of claim 321, wherein said selective communications device is a converter.

323. (New Claim) The method of claim 321, wherein said selective communications device is a storage device.

324. (New Claim) The method of claim 316, further comprising the steps of:  
detecting digital data in said second broadcast or cablecast transmission; and  
discarding said digital data detected in said second broadcast or cablecast  
transmission until a synchronizing control signal is detected.

325. (New Claim) A method of communicating one or more control signals to  
one or more receiver stations each of which includes a processor for storing and processing  
digital data included in at least one broadcast or cablecast transmission, comprising the steps  
of:

receiving a first broadcast or cablecast transmission to be transmitted, said broadcast  
or cablecast transmission including said digital data;

receiving a first control signal which at said one or more receiver stations operates to  
designate a second broadcast or cablecast transmission;

receiving a second control signal which operates at a transmitter station to  
communicate said first control signal to a first transmitter; and

transmitting said first broadcast or cablecast transmission, said digital data, and said  
first control signal, wherein said first control signal is operative at said one or more receiver  
stations to cause said processor to cease storing said digital data.

326. (New Claim) The method of claim 325, wherein said first control signal  
operates at said one or more receiver stations to designate a memory, said method further  
comprising the steps of:

transmitting a third control signal, said third control signal operating at said memory;  
storing or outputting, at said memory, programming contained in said second  
broadcast or cablecast transmission in response to said third control signal.

327. (New Claim) The method of claim 325, wherein said first control signal  
enables said one or more receiver stations to execute one or more controlled functions in

response to information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting a series of instructions in said first control signal.

328. (New Claim) The method of claim 327, wherein a first one or more of said series of instructions controls one or more of a converter, a mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast or cablecast transmission.

329. (New Claim) The method of claim 328, wherein a second of said series of instructions operates at said one or more receiver stations to synchronize processing of said information contained in said second broadcast or cablecast transmission.

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330. (New Claim) The method of claim 327, further comprising the step of transmitting operating instructions which program said one or more of said plurality of receiver stations to execute said controlled functions in response to said information contained in said second broadcast or cablecast transmission.

331. (New Claim) The method of claim 330, wherein a selective communications device is operatively connected to a receiver at said transmitter station and said operating instructions program said one or more receiver stations to execute said controlled functions in response to one or more receiver station execution instructions contained in said second broadcast or cablecast transmission, said method further comprising the step of outputting said selective communications device to said transmitter in response to said second control signal.

332. (New Claim) The method of claim 331, wherein said selective communications device comprises a memory which stores said one or more execution instructions in at least some of a message stream and said operating instructions program

said one of said plurality of receiver stations to process at least one message, said method further comprising the steps of:

detecting one or more transmitter station execution instructions in said message stream; and

programming at least one processor at said transmitter station to respond to said one or more transmitter station execution instructions.

333. (New Claim) The method of claim 332, wherein said operating instructions program said one or more receiver stations to detect at least a first synchronizing control signal, said method further comprising the steps of:

programming at least one processor at said transmitter station to detect said at least a first synchronizing instruction; and

generating one or more second synchronizing control signals which are effective to synchronize said one or more receiver stations.

334. (New Claim) The method of claim 333, wherein one or more of said first and second synchronizing control signals is an end of file signal.

335. (New Claim) The method of claim 325, further comprising the step of transmitting said first broadcast or cablecast transmission based on said second control signal.

336. (New Claim) The method of claim 335, wherein said second control signal is a schedule, said method further comprising the step of generating said first control signal in accordance with said schedule.

337. (New Claim) The method of claim 335, wherein one or more transmitter stations include a memory operatively connected to said first transmitter, said method

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further comprising the step of outputting said memory in response to said second control signal.

338. (New Claim) The method of claim 337, wherein said first control signal is embedded in one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission, said method further comprising the step of storing at least some of said one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission at said memory.

339. (New Claim) The method of claim 325, wherein at least one transmitter station includes a second transmitter, said method further comprising the step of communicating one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission to said second transmitter in accordance with said second control signal.

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340. (New Claim) The method of claim 339, wherein said at least one transmitter station transmits a plurality of channels of programming, said method further comprising the step of multiplexing signals containing said first and second broadcast or cablecast transmissions.

341. (New Claim) The method of claim 339, wherein said at least one transmitter station comprises an intermediate transmission station, said method further comprising the step of embedding said first control signal in said second broadcast or cablecast transmission.

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342. (New Claim) A method of communicating one or more control signals to one or more receiver stations each of which includes a processor for storing and processing digital data included in at least one broadcast or cablecast transmission, comprising the steps of:

receiving a first broadcast or cablecast transmission to be transmitted and delivering said first broadcast or cablecast transmission to one or more transmitters, said first broadcast or cablecast transmission containing said digital data;

receiving and storing a first control signal which at said one or more receiver stations operates to designate a second broadcast or cablecast transmission; and

causing said first control signal to be communicated to a first of said one or more transmitters at a specific time, thereby to transmit said first broadcast or cablecast transmission, said digital data, and said first control signal, wherein said first control signal is operative at said one or more receiver stations to cause said processor to cease storing said digital data.

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343. (New Claim) The method of claim 342, wherein said first control signal is received at a memory, said method further comprising the steps of:

generating said first control signal before said specific time; and  
communicating said first control signal to said memory.

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344. (New Claim) The method of claim 343, further comprising the steps of:  
receiving a schedule at a controller; and  
communicating one of said first control signal and a second control signal in accordance with said schedule.

345. (New Claim) The method of claim 342, further comprising the steps of:  
receiving an intermediate generation set; and  
generating said first control signal in accordance with said intermediate generation set.

346. (New Claim) The method of claim 345, further comprising the steps of:

storing, before said specific time, formula or item information to serve as a basis for generating said first control signal; and

using said formula or item information to serve as a basis for generating said first control signal.

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347. (New Claim) The method of claim 342, wherein said first control signal operates to control said one or more receiver stations to detect information contained in said second broadcast or cablecast transmission, said method further comprising the step of communicating to said first transmitter a synchronizing control signal for enabling said processor to output at least some of said detected information.

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348. (New Claim) The method of claim 347, wherein said synchronizing control signal is embedded in said second broadcast or cablecast transmission, said method further comprising the step of communicating said second broadcast or cablecast transmission to said first transmitter.

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349. (New Claim) The method of claim 348, wherein said synchronizing control signal enables said one or more receiver stations to execute one or more controlled functions in response to at least a portion of said information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting said at least a portion of said information after said specific time.

350. (New Claim) The method of claim 347, further comprising the step of transmitting said synchronizing control signal following said specific time.

351. (New Claim) The method of claim 342, further comprising the step of communicating said first broadcast or cablecast transmission to a second of said one or more transmitters prior to said specific time.

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352. (New Claim) The method of claim 342, further comprising the step of multiplexing a signal containing said first and second broadcast or cablecast transmissions.

353. (New Claim) A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission, said method comprising the steps of:

receiving a first broadcast or cablecast transmission;

demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data and a first control signal;

detecting said digital data in said information transmission and passing said detected digital data to said processor;

storing at least some of said detected digital data at said receiver station;

detecting said first control signal designating a second broadcast or cablecast transmission; and

causing said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data in correlation with said step of detecting said first control signal.

354. (New Claim) The method of claim 353, further comprising the step of tuning a tuner at said receiver station to receive said second broadcast or cablecast transmission in response to said first control signal.

355. (New Claim) The method of claim 353, wherein said second broadcast or cablecast transmission contains video, said method further comprising the step of displaying said video at said receiver station.

356. (New Claim) The method of claim 353, wherein said second broadcast or cablecast transmission contains audio, said method further comprising the step of outputting said audio at said receiver station.

357. (New Claim) The method of claim 353, wherein said second broadcast or cablecast transmission contains a second control signal, said method further comprising the step of processing said second control signal.

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358. (New Claim) A method of processing a microprocessor interrupt signal at a receiver station, said receiver station having a television receiver, a television monitor, a memory for storing a microprocessor interrupt signal, and a microprocessor for performing one of the functions of generating information for display on said television monitor and controlling the passage of information for display on said television monitor, said method comprising the steps of:

- receiving one of a broadcast and a cablecast transmission;
- demodulating said one of said broadcast and said cablecast transmission to detect an information transmission thereon, said information transmission comprising a microprocessor interrupt signal standard and embedded data, said embedded data including a microprocessor interrupt signal;
- storing said microprocessor interrupt signal standard;
- detecting said embedded data on said information transmission;
- passing said detected embedded data to a memory location;
- comparing said detected embedded data at said memory location with said microprocessor interrupt signal standard;
- detecting the presence of said microprocessor interrupt signal in said detected embedded data based on said step of comparing; and
- interrupting said microprocessor.

359. (New Claim) The method of claim 358, further comprising the steps of:  
storing said detected embedded data at said memory location; and  
programming said receiver station to compare information stored at said memory  
location to said microprocessor interrupt signal standard.

360. (New Claim) The method of claim 358, further comprising the step of:  
storing a second microprocessor interrupt signal standard.

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361. (New Claim) A method of communicating a microprocessor interrupt  
signal to at least one of a plurality of receiver stations each one of said plurality of receiver  
stations having a television receiver, a television monitor, and a microprocessor for  
performing one of the functions of generating information for display on said television  
monitor and controlling a passing of information for display on said television monitor, said  
method comprising the steps of:

receiving an information transmission to be transmitted in one of a broadcast and a  
cablecast transmission;

receiving said microprocessor interrupt signal which operates at said at least one of  
said plurality of receiver stations to enable said at least one of said plurality of receiver  
stations to compare said microprocessor interrupt signal to a microprocessor interrupt signal  
standard and communicate to the microprocessor at said at least one of said plurality of  
receiver stations information of a microprocessor interrupt signal match;

receiving a control signal which operates at a transmitter station to communicate said  
microprocessor interrupt signal to a transmitter; and

transmitting said one of said broadcast and said cablecast transmission comprising  
said microprocessor interrupt signal to effect said at least one of said plurality of receiver  
stations to compare said microprocessor interrupt signal to said microprocessor interrupt

signal standard and communicate said information of said microprocessor interrupt signal match.

362. (New Claim) The method of claim 361, wherein communicating said information of said microprocessor interrupt signal match at said at least one of said plurality of receiver stations comprises interrupting said microprocessor at said at least one of said plurality of receiver stations.

363. (New Claim) The method of claim 361, wherein said step of transmitting enables each of said plurality of receiver stations to interrupt a microprocessor.

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364. (New Claim) The method of claim 361, wherein said information of said microprocessor interrupt signal match causes said at least one of said plurality of receiver stations to output a portion of a combined or sequential presentation of television programming and a receiver specific datum, said method further comprising the step of transmitting said television programming.

365. (New Claim) The method of claim 361, further comprising the step of transmitting said microprocessor interrupt signal standard.

366. (New Claim) The method of claim 361, wherein said information of said microprocessor interrupt signal match causes said at least one of said plurality of receiver stations to execute a microprocessor instruction, said method further comprising the step of transmitting said microprocessor instruction.

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367. (New Claim) A method of communicating a microprocessor interrupt signal to at least one of a plurality of receiver stations, each one of of said plurality of receiver stations having a television receiver, a television monitor, and a microprocessor for performing one of the functions of generating information for display on said television

monitor and controlling a passing of information for display on said television monitor, said method comprising the steps of:

receiving an information transmission to be transmitted in one of a broadcast and a cablecast transmission, and delivering said information transmission to a transmitter;

receiving and storing said microprocessor interrupt signal which operates at said at least one of said plurality of receiver stations to enable said at least one of said plurality of receiver stations to compare said microprocessor interrupt signal to a microprocessor interrupt signal standard and communicate to the microprocessor at said at least one of said plurality of receiver stations information of a microprocessor interrupt signal match; and

communicating said microprocessor interrupt signal to said transmitter at a specific time, thereby to transmit one of said broadcast and said cablecast transmission comprising said microprocessor interrupt signal to effect said at least one of said plurality of receiver stations to compare said microprocessor interrupt signal to said microprocessor interrupt signal standard and communicate said information of said microprocessor interrupt signal match.

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368. (New Claim) The method of claim 367, wherein communicating said information of said microprocessor interrupt signal match at said at least one of said plurality of receiver stations comprises interrupting said microprocessor at said at least one of said plurality of receiver stations.

369. (New Claim) The method of claim 367, wherein said step of transmitting enables each of said plurality of receiver stations to interrupt a microprocessor.

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370. (New Claim) The method of claim 367, wherein said information of said microprocessor interrupt signal match causes said at least one of said plurality of receiver stations to output a portion of a combined or sequential presentation of television



programming and a receiver specific datum, said method further comprising the step of transmitting said television programming.

371. (New Claim) The method of claim 367, further comprising the step of transmitting said microprocessor interrupt signal standard.

372. (New Claim) The method of claim 367, wherein said information of said microprocessor interrupt signal match causes said at least one of said plurality of receiver stations to execute a microprocessor instruction, said method further comprising the step of transmitting said microprocessor instruction.

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373. (New Claim) A method of processing a microprocessor interrupt signal at a receiver station, said receiver station having a television receiver, a television monitor, and a microprocessor for performing one of the functions of generating information for display on said television monitor and controlling the passage of information for display at said television monitor, said method comprising the steps of:

storing a microprocessor interrupt signal standard;  
receiving one of a broadcast and a cablecast transmission;  
demodulating said one of said broadcast and said cablecast transmission to detect an information transmission thereon, said information transmission comprising embedded data, said embedded data including a microprocessor interrupt signal;  
detecting said embedded data on said information transmission;  
passing said detected embedded data to a memory location;  
comparing said detected embedded data at said memory location with said microprocessor interrupt signal standard;  
detecting the presence of said microprocessor interrupt signal in said detected embedded data based on said step of comparing;  
interrupting said microprocessor; and,

performing at least one of the functions of (i) generating television programming content based on said step of interrupting and (ii) outputting television programming content from a memory to said television monitor at a specific time based on said step of interrupting.

374. (New Claim) The method of claim 373, wherein said memory stores television programming content generated in accordance with microprocessor instructions, said method further comprising the steps of:

passing said microprocessor instructions to said microprocessor.

375. (New Claim) The method of claim 374, wherein said receiver station detects a plurality of microprocessor interrupt signals, said method further comprising the steps of:

generating specific television programming content in response to a first of said plurality of microprocessor interrupt signals; and

outputting said specific television programming content in response to a second of said plurality of microprocessor interrupt signals.

376. (New Claim) The method of claim 374, wherein said receiver station detects a plurality of microprocessor interrupt signals, said method further comprising the steps of: and

causing said memory to store specific television programming content in response to a first of said plurality of microprocessor interrupt signals; and

causing said memory to output said specific television programming content to said television monitor in response to a second of said plurality of microprocessor interrupt signal.

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377. (New Claim) A method of processing a microprocessor interrupt signal at a receiver station, said receiver station having a television receiver, a television monitor, and a microprocessor for performing one of the functions of generating information for display on said television monitor and controlling the passage of information for display on said television monitor, said method comprising the steps of:

storing a microprocessor interrupt signal standard;

storing an identifier for comparison, said identifier designating a function to be performed in response to said microprocessor interrupt signal;

receiving one of a broadcast and a cablecast transmission;

demodulating one of said broadcast and said cablecast transmission to detect an information transmission thereon, said information transmission comprising embedded data, said embedded data including said microprocessor interrupt signal;

detecting said embedded data on said information transmission;

passing said detected embedded data to a memory location;

selecting one of a plurality of functions based on a comparison of said identifier and at least a portion of said detected embedded data;

comparing said detected embedded data at said memory location with said microprocessor interrupt signal standard;

detecting the presence of said microprocessor interrupt signal in said detected embedded data based on said step of comparing;

interrupting said microprocessor to execute said selected one of said plurality of functions at a specific time.

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378. (New Claim) A method of processing signals at a receiver station, said receiver station having a processor for processing digital data detected in one or more carrier transmissions and outputting instructions and other information, said method comprising the steps of:

commencing to receive said one or more carrier transmissions;  
demodulating said one or more carrier transmissions to detect at least one  
information transmission thereon, said at least one information transmission including digital  
data embedded in said at least one information transmission;  
detecting said embedded data in said at least one information transmission;  
processing said detected embedded data to detect a distinctive first synchronizing  
control signal within said detected embedded data;  
discarding at least some of said detected data received and  
stored before said distinctive first synchronizing control signal is detected; and  
detecting said distinctive first synchronizing control signal, said distinctive first  
synchronizing control signal enabling said receiver station to commence executing controlled  
functions in response to embedded data received in said one or more carrier transmissions  
after the detection of said distinctive first synchronizing control signal.

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379. (New Claim) The method of claim 378, wherein said step of discarding at  
least some of said detected data includes instructing a processor to delete data detected in a  
first carrier transmission.

380. (New Claim) ~~The method of claim 379, wherein said step of commencing  
to receive one or more carrier transmissions includes tuning a receiver to receive a second  
carrier transmission.~~

381. (New Claim) The method of claim 379, wherein said step of instructing a  
processor includes communicating a processor interrupt.

382. (New Claim) The method of claim 378, wherein said step of commencing  
to receive one or more carrier transmissions comprises controlling a selective

communications device to communicate to a receiver at least one of said one or more carrier transmissions.

383. (New Claim) The method of claim 382, wherein said selective communications device is a converter.

384. (New Claim) The method of claim 382, wherein said selective communications device is a storage device.

385. (New Claim) The method of claim 378, further comprising the steps of:  
detecting a second synchronizing control signal based on said distinctive first synchronizing control signal; and

analyzing, based on said second synchronizing control signal, a data structure of said embedded data received in said one or more carrier transmissions after the detection of said distinctive first synchronizing signal.

386. (New Claim) The method of claim 385, further comprising the step of interrupting said processor in response to at least a portion of said distinctive first synchronizing control signal.

387. (New Claim) The method of claim 386, wherein said distinctive first synchronizing control signal includes an end of file signal.

388. (New Claim) The method of claim 378, further comprising the steps of:  
detecting a second synchronizing control signal based on said distinctive first synchronizing control signal; and

executing, based on said second synchronizing control signal, one or more of said controlled functions.

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389. (New Claim) A method of communicating digital data to a plurality of receiver stations each of which includes a receiver and a processor for processing said digital data detected in a broadcast or cablecast transmission and outputting portions of messages containing instructions and other information, comprising the steps of:

receiving said digital data to be transmitted;  
receiving at least a first synchronizing control signal which at one of said plurality of receiver stations operates to enable said one of said plurality of receiver stations to commence executing controlled functions;

receiving a second control signal which operates at a transmitter station to communicate one of said digital data and said at least a first synchronizing control signal to a transmitter; and

transmitting said broadcast or cablecast transmission comprising said digital data and said at least a first synchronizing control signal to effect said one of said plurality of receiver stations to process said digital data to detect said at least a first synchronizing control signal, wherein at least some of said digital data is discarded by said one of said plurality of receiver stations until said at least a first synchronizing control signal is detected.

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390. (New Claim) The method of claim 389, wherein said at least a first synchronizing control signal is received from a remote origination station, said method further comprising the step of controlling a selective communications device to communicate said at least a first synchronizing control signal in accordance with said second control signal.

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391. (New Claim) The method of claim 390, wherein said selective communications device includes one of a memory and a switch, said method further comprising the step of controlling said one of a memory and a switch to communicate mass medium programming based on said second control signal.

392. (New Claim) The method of claim 391, wherein said memory stores a signal containing said mass medium programming and said at least a first synchronizing control signal, said method further comprising the step of controlling communication of said mass medium programming from a receiver to said memory based on said second control signal.

393. (New Claim) The method of claim 389, wherein said second control signal includes a schedule and said at least a first synchronizing control signal is included in a series of instruct signals, said method further comprising the step of controlling a first selective communications device to communicate said series of instruct signal in accordance with said schedule.

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394. (New Claim) The method of claim 393, wherein said series of instruct signals comprises one or more receiver station instruct signals and one or more transmitter station instruct signals, said method further comprising the steps of:

- transmitting said one or more receiver station instruct signals; and
- controlling one or more second selective communications devices in response to said one or more transmitter station instruct signals.

395. (New Claim) The method of claim 394, wherein said one or more second selective communications devices include a processor, said method further comprising the steps of:

- storing generally applicable information in respect of at least one of a receiver station video, audio, and graphic presentation; and
- generating at least one of video, audio, and computer programming to be transmitted by processing said generally applicable information.

396. (New Claim) The method of claim 393, further comprising the steps of:

storing one or more of formula and item information; generating transmitter specific data by processing said stored one or more of formula and item information; and transmitting said transmitter specific data based on said schedule.

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397. (New Claim) The method of claim 389, further comprising the step of transmitting operating instructions which program said one of said plurality of receiver stations to execute said controlled functions in response to said digital data.

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398. (New Claim) The method of claim 397, wherein a selective communications device is operatively connected to a receiver and said operating instructions program said one of said plurality of receiver stations to execute said controlled functions in response to one or more receiver station execution instructions contained in said digital data, said method further comprising the step of outputting said selective communications device to said transmitter in response to said second control signal.

399. (New Claim) The method of claim 398, wherein said selective communications device comprises a memory which stores said digital data in a message stream and said operating instructions program said one of said plurality of receiver stations to process at least one message, said method further comprising the steps of:

detecting one or more transmitter station execution instructions in said message stream; and

programming at least one processor to respond to said one or more transmitter station execution instructions.

400. (New Claim) The method of claim 397, wherein said operating system instructions program said one of said plurality of receiver stations to detect said at least a first synchronizing control signal, said method further comprising the steps of:



programming at least one processor to detect said at least a first synchronizing instruction; and

generating one or more second synchronizing control signals which are effective to synchronize said plurality of receiver stations.

401. (New Claim) The method of claim 400, wherein one or more of said first and second synchronizing control signals is an end of file signal.

402. (New Claim) The method of claim 389, wherein said at least a first synchronizing control signal includes a header signal.

403. (New Claim) The method of claim 389, wherein at least one synchronizing control signal includes an end of file signal.

404. (New Claim) A method of communicating digital data to a plurality of receiver station each of which includes a receiver and a processor for processing said digital data detected in a broadcast or cablecast transmission and outputting portions of messages containing instructions and other information, comprises the steps of:

receiving said digital data to be transmitted and delivering said digital data to a transmitter said transmitter broadcasting or cablecasting said transmission;

receiving and storing at least a first synchronizing control signal which at one of said plurality of receiver stations operates to enable said one of said plurality of receivers stations to commence executing controlled functions; and

causing said at least a first synchronization control signal to be communicated to the transmitter at a specific time, thereby to transmit said broadcast or cablecast transmission comprising said digital data and said at least a first synchronizing control signal to effect one of said plurality of receiver stations to process said digital data to detect said at least a first

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synchronizing signal, wherein at least some of said digital data is discarded by said one of said plurality of receiver stations until said at least a first synchronization signal is detected.

405. (New Claim) The method of claim 404, further comprising the step of transmitting, prior to said specific time, a tuning control signal which operates at said one of said plurality of receiver station to tune a receiver to receive a programming transmission.

406. (New Claim) The method of claim 405, further comprising the step of communicating said programming transmission to said transmitter.

407. (New Claim) The method of claim 406, further comprising the step of embedding said at least a first synchronizing control signal in said programming transmission prior to said specific time.

408. (New Claim) The method of claim 407, wherein said programming transmission is a code portion of a multichannel broadcast or cablecast signal, said method further comprising the step of transmitting, following said specific time, a portion receiver control signal which operates at said one of said plurality of receiver stations to control a portion receiver to receive an expanded or contracted code portion.

409. (New Claim) The method of claim 407, wherein said programming transmission contains said digital data in a message stream, said method further comprising the steps of:

generating transmitter specific data; and transmitting said transmitter specific data in said message stream following said specific time.

410. (New Claim) The method of claim 406, wherein said programming transmission contains one of television programming and computer programming, said method further comprising the step of controlling a selective communications device to

communicate said one of television programming and computer programming to said transmitter.

Sub G45 411. (New Claim) The method of claim 404, further comprising the step of transmitting, prior to said specific time, a receiver control signal which operates at said one of said plurality of receiver stations to receive one of a code portion and a master channel of a multichannel broadcast or cablecast transmission.

412. (New Claim) The method of claim 411, further comprising the step of transmitting, following said specific time, a portion receiver control signal which operates at said one of said plurality of receiver stations to control a portion receiver to receive an expanded or contracted code portion.

F/ Sub G46 Cont 413. (New Claim) The method of claim 404, further comprising the step of transmitting operating instructions which program said one of said plurality of receiver stations to execute said controlled functions in response to said digital data.

414. (New Claim) The method of claim 413, wherein a selective communications device is operatively connected to a receiver and said operating instructions program said one of said plurality of receiver stations to execute said controlled functions in response to one or more receiver station execution instructions contained in said digital data, said method further comprising the step of controlling said selective communications device to deliver said digital data to said transmitter.

415. (New Claim) The method of claim 414, wherein said selective communications device comprises at least one processor which receives said digital data in a message stream and said operating instructions program said one of said plurality of receiver stations to process at least one message, said method further comprising the steps of: programming said at least one processor to respond to one or more transmitter station

execution instructions; and communicating said digital data to said transmitter in said at least one message.

416. (New Claim) The method of claim 415, wherein said operating system instructions program said one of said plurality of receiver stations to detect said at least a first synchronizing control signal, said method further comprising the steps of: synchronizing said at least one processor to process said one or more transmitter station execution instructions in response to said at least a first synchronizing control signal; and generating one or more second synchronizing control signals which are effective to synchronize said plurality of receiver stations.

417. (New Claim) The method of claim 416, wherein one or more of said first and second synchronization control signals includes an end of file signal.

418. (New Claim) The method of claim 404, wherein said at least a first synchronizing control signal includes a header signal.

419. (New Claim) The method of claim 404, wherein at least one synchronizing control signal includes an end of file signal.

420. (New Claim) A method of controlling a receiver station to synchronize operations of a plurality of microprocessors located in said receiver station to execute downloadable microprocessor code, said method comprising the steps of:

inputting to one of said plurality of microprocessors an instruction to receive a television programming signal on a specific channel;

tuning a television receiver to a specific frequency, wherein said specific channel is transmitted on said specific frequency;

receiving said television programming signal at said television receiver;

demodulating said television programming signal to detect an information transmission thereon, said information transmission comprising embedded downloadable microprocessor code;

detecting said embedded downloadable microprocessor code;

detecting a synchronizing signal on said specific frequency; and

synchronizing operations of said plurality of microprocessors to execute said embedded downloadable microprocessor code on the basis of said detected synchronizing signal;

whereby said execution of said downloadable microprocessor code controls the functioning of said plurality of microprocessors.

421. (New Claim) The method of claim 420, wherein the step of synchronizing further comprises the step of communicating a microprocessor interrupt signal to at least one of said plurality of microprocessors based on said step of tuning said television receiver.

422. (New Claim) A method of controlling at least one of a plurality of receiver stations to synchronize operations of a plurality of microprocessors located in said at least one of said plurality of receiver stations to execute downloadable microprocessor code, said method comprising the steps of:

(1) receiving a synchronizing signal to be transmitted;

(2) receiving said downloadable microprocessor code to be transmitted;

(3) receiving a control signal which operates at a transmitter station to communicate said synchronizing signal and said downloadable microprocessor code to a transmitter; and

(4) transmitting a television programming transmission including said downloadable microprocessor code and said synchronizing signal to said at least one of a plurality of receiver stations, wherein said at least one of a plurality of receiver stations detects said downloadable microprocessor code and said synchronizing signal on a preselected frequency

and synchronizes operations of said plurality of microprocessors in said at least one of receiver stations to execute said downloadable microprocessor code based on said synchronizing signal;

whereby said execution of said downloadable microprocessor code controls the functioning of said plurality of microprocessors.

423. (New Claim) A method of controlling at least one of a plurality of receiver stations to synchronize operations of a plurality of microprocessors located in said at least one of said plurality of receiver stations to execute downloadable microprocessor code, said method comprising the steps of:

(1) receiving a television signal to be transmitted and delivering said television signal to a transmitter;

(2) receiving and storing a synchronizing signal and said downloadable microprocessor code; and

(3) causing said synchronizing signal and said downloadable microprocessor code to be communicated to the transmitter in a television programming transmission at a specific time, thereby to transmit said television programming transmission including said synchronizing signal to effect said at least one of a plurality of receiver stations to detect said downloadable microprocessor code and said synchronizing signal on a preselected frequency and to synchronize operations of said plurality of microprocessors in said at least one of said plurality of receiver stations to execute said downloadable microprocessor code based on said synchronizing signal;

whereby said execution of said downloadable microprocessor code controls the functioning of said plurality of microprocessors.--